

# INTEREST RATES AND PROFITABILITY OF COMMERCIAL BANKS IN KENYA

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DOI: <https://doi.org/10.5281/zenodo.8420639>

Published Date: 09-October-2023

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**Abstract:** Banks play a crucial role in stimulating economic growth and development, as they guarantee the accumulation of capital and investment within the economy. Nevertheless, the profitability of commercial banks is heavily dependent on the prudential regulatory systems that govern their operations. The study assessed interest rate effect on profitability of commercial banks in Kenya. The research was based on agency theory. A casual approach to investigation was adopted. The target population consisted of the 43 commercial banks in Kenya, and the inclusion criterion was institutions that have been operational for nine years (between 2013 and 2021). Due to the magnitude of the population, the response rate of a survey consisted of all 43 commercial banks that were selected via census sampling. The study acquired secondary data from the bank's financial statements and audited reports using a data collection schedule. Findings indicate that interest rate has a significant effect on commercial banks profitability in Kenya. The study recommends that bank managers should set interest rates in line with the prevailing market conditions.

**Keywords:** Interest Rate, Profitability and Commercial Banks.

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## 1. INTRODUCTION

### 1.1 Introduction and Background

Globally, to ensure that the banking industry adheres to the essential criteria whenever it provides financial services to a specific consumer, some economies have had to prudentially regulate it. For instance, in Australia, the banking, securities, insurance, and pensions markets are among the financial activities that are subject to regulation by financial regulatory bodies, however in some situations, there are additional authorities with jurisdiction over specific financial sectors (Lartey, Antwi, &Boadi, 2013). In particular, the organization tasked with overseeing commercial banks alongside the central bank is the Australian Prudential Regulation Authority (APRA). Yet, despite the introduction of prudential laws, certain banks continue to have trouble adhering entirely to the criteria imposed by various regulatory agencies.

Moreover, in the 1980s, financial institutions in the majority of Western nations underwent a process of deregulation. Governments in the UK, for instance, either eliminated or scaled back state rules that governed financial institutions (Ana et al., 2011). The reason for this is that, in the minds of policymakers, deregulatory measures is the best approach towards enhancing effectiveness and efficiency of these organizations. The goals of the programs were to increase price, product, and regional competition among banks. Regarding the financial soundness of financial institutions, this deregulation process has, nevertheless, been a mixed bag of results.

Banks favorable competition and growth depends on the ability of their earning power which emanates from market share control. Profits are palliatives that cushion the negative effect of shocks which emanates from uncertainty associated with the business environment. Thus, profitability in the banking industry saves the system from total collapse and position confidences in depositors funds (Wapmuk, 2016).

The finance industry of Kenya dominated by commercial banks which facilitates the mobilization of funds from deficit economic units to surplus economic units. According to CBK (2013) 30 of the 44 commercial banks are locally held, while the remaining 14 are owned externally. Muriithi *et al.* (2016) observed that foreign banks accounted for 34% of the banks' asset holding in 2013. The commercial banks in Kenya are determined by weighted composite index which is categorized into prepayments, liquid worth, retained earnings, as well as equity, in addition to accumulated payment or reserve transactions (CBK, 2018).

### 1.2 Statement of the Problem

Commercial banking institutions have been seen as key contributors to the development and expansion of the economy. Commercial banks are essential drivers of Kenya's economy, through which they provide financial services and also act as a financial distribution network to firms and citizens of the country (Maina & Omagwa, 2020). The profitability of Kenya's banking sector has increased substantially over time, but this has decreased as a consequence of the covid-19 pandemic. In 2020, the banking industry's pre-tax profit decreased by 17.2% to KSh 134.1 billion as a result of an 11.9% increase in expenses compared to a 2.9% increase in income. The dwindling profitability of commercial banks profit guided toward inclusion of Imperial Bank Limited by KCB Bank Kenya Limited under receivership in June 2020 (CBK, 2020).

Despite their critical importance to the economy CBK (2020) reckon that the banking sector has been facing a decline over the past few years with the 2015 profit prior to tax having declined beginning at 141.1 billion Kenyan shillings as at 2014 up to 134.0 billion Kenyan shillings as at 2015, a reduction by 5.03 per cent (CBK Annual Report, 2015). Further, the sector recorded profitability decline in 2017 with profit prior to tax reducing by 9.6 percentage beginning at 147.4 Kenyan shillings in billion around 2016 December towards 133.2 Kenyan shillings in billion, at 2017 December though it increased marginally to Ksh 152.7 in 2018 (CBK 2018). The dwindling growth of profit of Kenyan commercial banks has drawn a lot of attention from stakeholders. In view of this, the study sought to examine the effect of interest rate on profitability of commercial banks in Kenya.

### 1.3 Purpose of the Study

The study sought to examine the effect of interest rate on profitability of commercial banks in Kenya.

## 2. LITERATURE REVIEW

### 2.1 Empirical Review

Muzammil and Siddiqui (2020) used correlational assessment to investigate the impact of investment percentages as well as bank - specific on the earnings of Islamic banks in Pakistan. Interest rates were discovered to have an important invertible influence on ROE, whereas working capital as well as total assets seemed to have a substantial favorable influence on profitability. The modified version, dimensions, as well as creditworthiness all have an adverse impact on bank earnings. Interest rates and size of the bank had a negative comparable effect on predicting financial institutions' revenue and profits. The report's concentrate was on Islamic banking institutions in Pakistan, while banking institutions were the study's mainstay.

Ilugbemi (2020) looked into how interest rates affected deposit money banking profits in Nigeria between 2004 and 2018. For parameter estimation, the ordinary least squares method was used. The analysis showed that there were still significant and insignificant relationships between the ROA of Nigerian banks and the rate of interest, monetary aggregates, nominal interest rate, and reserve fund to overall interest expense ratio. The study found that interest rates had no bearing on determining whether deposit money institutions in Nigeria were viable. The results of this survey could be used in Kenya due to variations in financial institutions between the two economic sectors. This study concentrated on Kenyan commercial banking institutions as a result.

Interest rate effect on the financial performance of Kenyan commercial banks was examined by Mwangi and Wambari in 2017. Using a multi-linear regression model, the inquiry used a census design. The ratio of borrowing rates, according to the study, has a positive effect on the financial efficiency of commercial banking organizations. The effectiveness of the banking industry's finances is negatively impacted by changes in the interest ratio. It was shown that the ratio of borrowing rates has a significantly good effect on the banking industry's financial efficiency. The rate of interest on loans made by the banking industry to other financial institutions or the proportion of loans provided by commercial banking institutions was substituted for the rate of interest in this investigation.

## 2.2 Theoretical Review

Jensen and Meckling introduced agency theory in 1976. The relationship between business principals and agents is explained by this theory. It is focused on finding solutions to issues that may arise in an agency relationship as a result of different goals or wants between the principal and agent. Between shareholders (primary) and corporate executives, there is the most prevalent agency connection in finance (agents). This circumstance could arise when the principal is unaware of the agent's behavior or is unable to find out due to a lack of resources.

Shareholders are the principals and bank management is the agent in commercial banks. Shareholders provide bank management daily management responsibilities but expect them to maximize shareholder wealth (Ndolo, 2017). Problems in agency relationships are addressed by agency theory. The first is the agency dilemma, which appears when the principals and the agents aims clash and it is challenging for the principal to monitor the agent's actions. Thus, the theory is pertinent to the study in that commercial banks serve customers, and in situations of credit risk, principals must take precautions to avoid losses by adhering to prudential regulations.

## 3. RESEARCH METHODOLOGY

Quantitative method of analysis was utilized. Secondary data was collected by obtaining them from each commercial bank's published financial reports which are made available to the public from their website. The secondary data was collected over a nine-year span (2013-2021). Consequently, secondary data was gathered for all variables. Interest rate was the independent variable and profitability was the dependent variable. The current study used a causal research methodology that places special emphasis on the relationships between variables that are studied from a cause-and-effect perspective. An empirical model is one that outlines the link between the variables to be examined mathematically as follows:

$$PR_{it} = \beta_0 + \beta_1 IR_{it} + \varepsilon$$

Where:

PR = Profitability

IR = Interest Rate

$\beta_0, \beta_1$ , = Coefficients

$\varepsilon$  = Error term

## 4. RESEARCH FINDINGS AND DISCUSSIONS

### 4.1 Descriptive Statistics

The features of the variables used in the study are presented in this section of the survey. This outcome encapsulated the both the outcomes of the factors used in the study with respect to the measures of central tendency and dispersions. With this, the summary of the descriptive outcome is presented in Table 4.1.

**Table 4.1: Descriptive Statistics**

| Variable      | Obs | Mean    | Std. Dev. | Min     | Max    |
|---------------|-----|---------|-----------|---------|--------|
| Profitability | 313 | -0.0839 | 0.2309    | -0.7937 | 1.2461 |
| Interest Rate | 368 | 14.4388 | 2.0391    | 12      | 17.3   |

**Source: Study Data (2023)**

The outcome of the descriptive analysis portrayed in the investigation showed the mean and standard deviation of Profitability to be -0.0839 and 0.2309. The data used for Profitability of the banks indicated that all the values falls within the range of -0.7937 as the lowest value and 1.2461 as the highest value. With this, it connotes that the profitability of commercial banks in Kenya differs from each other at the rate of 0.2309. Interest rate has a mean value of 14.4388, displaying a standard deviation of 2.0391. Therefore, the interest rate has a range of values that ranges from 12 to 17.3%.

#### 4.2 Regression Analysis

**Table 4.2: Regression Results**

| Profitability  | Coef.    | Std. Err. | Z     | P> z  | [95% Conf. | Interval] |
|----------------|----------|-----------|-------|-------|------------|-----------|
| Interest Rate  | 0.0395   | 0.0230    | 1.72  | 0.085 | -0.0055    | 0.0846    |
| _cons          | -0.3850  | 0.3314    | -1.16 | 0.245 | -1.0346    | 0.2644    |
| R <sup>2</sup> | = 0.0740 |           |       |       |            |           |
| Wald chi2 (3)  | = 31.46  |           |       |       |            |           |
| Prob> chi2     | = 0.0000 |           |       |       |            |           |

#### Source: Study Data (2022)

A Wald chi2 statistics value of 31.46 and an associated p-value of 0.0000 were achieved, indicating the model's relevance. The profitability of Kenya's commercial banks was significantly affected by interest rates. The study aimed at establishing the effect of interest rate on profitability of Kenyan commercial banks which was based on the threshold of 0.1 percent significance level. Based on the p-value of 0.085, interest rate had a significant effect on profitability of Kenyan commercial banks. Similarly, Mwangi and Wambari (2017) had positive significant effect on financial performance of Kenyan commercial banks

### 5. CONCLUSIONS AND RECOMMENDATIONS

The study found that interest rate had significant effect on profitability. As such, it was concluded that the profitability of commercial banks in Kenya is significantly determined by interest rate. Despite the positive relationship between interest rate and profitability, bank managers should not be too aggressive when setting interest rates. The study recommends that bank managers should set interest rates in line with the prevailing market conditions.

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